The Soviets in the Antarctic 1955-1956

- I. The Soviet Union is successfully completing its first season's activity on the Continent
 - A. The mission of the 1955-56 season was
 - 1. The establishment of a so-called "long-lasting" base and the South Polar Observatory
 - 2. Reconnaissance and exploration for two interior stations
 - 3. Initiation of scientific studies on land and sea
- B. Three ships -- the first arriving 5 January and the last departing on 18 March 1956 delivered
 - 1. Over 8,000 tons of cargo
 - 2. Six aircraft
 - 3. 40 pieces of rolling stock
 - 4. 355 people -- of whom 92 remained for the winter
- C. Two permanent bases and four mobile stations were established and operated. Fuel and provisions for a seventh station were deposited
 - 1. Mirnyy -- the main base -- was completed on 17 March to accommodate 100 persons. The elaborate station and observatory, built on a rock foundation, includes 49 buildings, 5 scientific pavilions, three laboratories, and other auxiliary buildings.
 - 2. Pionerskaya (Pioneer) -- an interior base to the South Geomagnetic Station (Vostok) was built nearly 250 miles inland and at an elevation of 9,000 ft.

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- a. The Soviets describe this as the first interior scientific station in the history of the Continent.
- b. The station was completed late in the fall after an arduous two sledge-train traverse, augmented by air support and reconnaissance operating over a four-week period.
- 3. Four mobile research stations -- forerunners of a network of 50-60 -- were established and manned in the vicinity of the main base.
- D. An active program of air reconnaissance, exploration and air support to ground parties was undertaken to advance the establishment of the interior stations in 1957-58.
 - 1. Two long-range reconnaissance flights were made dovering in the direction of the two interior bases.
 - 2. Aerial photo surveys were made into the interior and to the east and west of the main base \int and west of the main base.
 - 3. Thirteen ice reconnaissance flights were completed.
 - 4. A number of flights were made into the plateau to test landing and take-off under high altitude and ice cap conditions.
 - 5. Logistical support to the sledge parties provided experience to set up the two interior stations. Out of this has come the decision to use this method for their establishment.
- II. An ambitious scientific, mapping and charting program was undertaken on land and sea.
- A. Observations in several fields of the IGY program were begun although the IGY period of observation is not scheduled until January 1957.

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- 1. These included the fields of meteorology, ionospheric physics, solar radiation, geomagnetism, glaciology, and oceanography.
- B. The Ob -- with its seven laboratories and 48 scientists -- made observations over more than 20,000 miles of which more than 4,000 were in Antarctic waters.
 - 1. In addition to oceanographic observations, hydrographic surveys by continuous echo-recorders were made of all areas up to 4,000 meters in depth. 1,040 miles of Antarctic waters were surveyed "for which no navigation charts are available."
 - C. Other non-IGY activities were given emphasis
 - 1. Geological and geographic investigations were made along 550 miles of coast -- from Mount Gauss to Knox Coast.
 - a. Considerable interest was shown in the 500 sq. km.
 ice-free oasis of Bunger Hills. A ten-day study was made by a
 team of scientists. Fuel and provisions were later flown in to
 set up an unpublicized station in 1957-58.
 - b. Similar, though less intensive, studies were made of other selected areas.
 - 2. Extensive mapping and charting was undertaken integrally with scientific and reconnaissance activities.
 - a. Ground control was established in conjunction with aerial photography along the coast. [Photography of the interior was ruined by a camera defect.] Over 5,000 sq. miles were mapped.
 - b. Hydrographic surveys emphasized coastal work for 67° of longitude; features were positioned for hundreds of miles and a number of astronomic positions were determined.

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- 3. Within six months after entry on the Continent the Soviets compiled and widely disseminated at Paris in July two maps showing Soviet place names and corrected physical features.
- III. Although concentrating on construction and scientific activities the Soviets engaged in a number of politically significant activities.
 - A. Specific actions of value to an eventual claims policy included
 - 1. Raising the Soviet flag at four known points
 - 2. Deposition in at least two places of Soviet records in stone cairns under a Soviet flag
 - 3. Announced claims to the discovery of at least two groups of islands
 - 4. Assignment of Soviet names to a number of physical features
 - 5. Exercise of administrative authority in a declaration of Haswell Islets as a game preserve
 - 6. The designation of the "head of the sea coast base" as "the mayor of the future city."
 - B. Soviet publicity has been heavily slanted to underscore
 - 1. Field activities in unexplored or insufficiently studied areas
 - 2. The total lack or inaccuracy of existent maps and charts of specific areas, and Soviet activities to produce new maps or corrections of old ones
 - 3. A number of Soviet firsts:
 - a. the first overland trip inland
 - b. the first interior scientific station
 - c. the first scientific study of Shackleton Glacier

- C. The Soviet-requested delay in the convening of the second Paris
 Antarctic Conference permitted reporting an impressive display of Soviet
 accomplishments in the form of maps, photos of the base, and reports of
 activities.
- D. While most Soviet publicity avoided political discussions, the Chairman of the Council for Antarctic Research in March 1956 restated the Soviet line on Antarctica including
 - 1. Claimed prior Russian discovery of the Continent
 - 2. Dispute of priority of the discovery by Palmer
 - 3. Distortion of historical facts to justify U.S. seizure of Antarctic territory
 - 4. Rejection of the Sector principle of claims
 - 5. The economic and strategic basis of "imperialist" claims to Antarctic territory
 - 6. Reiteration of the 1950 Soviet claim to a voice in the settlement of Antarctic territory
- IV. An expansion in activities and objectives has been revealed
- A. The Chairman of the Council on Antarctic Research, Academy of Sciences has provided the first explicit evaluation of the Antarctic as "important in a strategic aspect."
- B. Later, he outlines additional study objectives in Antarctica that suggest strategic connotations
 - 1. The study of aerial navigation and the basing of aircraft in Antarctica. This lends additional meaning to Soviet objectives in establishing Soviet-Antarctic air operations via Australia.
 - 2. Development of aerial surveying under Antarctic conditions.

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- 3. Research on the functioning of navigation and piloting equipment in the high latitudes.
- C. An elaborate gravimetric effort far in excess of the glaciological needs of the IGY program was further revealed at Paris, this year. If achieved, such a program will yield data of value to the refinement of the size and shape of the earth -- an objective useful to improving long-range target positioning.
- D. Economic objectives are indicated in the plan "to study the raw materials base and to search for new regions for the whaling industry."
 - 1. This will support (a) new whaling vessels being added in 1956-57 and (b) the new, additional fleet now under construction.
 - 2. The heavy stress on geological surveying will be of value to evaluation of the mineral potential of the Continent.
- E. A substantial expansion in the territorial extent of Soviet activities is planned.
 - 1. The original plan of "one or two" stations was increased in September 1955 to three.
 - 2. In 1956 this was increased by two intermediate stations to a total of five. A sixth is to be established at Bunger Hills, and a possible seventh at the South Pole. Thus the fixed-station network will equal or surpass that of the U.S.
 - 3. A broad network of 50-60 mobile stations is being contemplated.
 - 4. An extended program of overland traverses from the coast to the Pole is contemplated, encompassing a sector from 70°E to 105°E, or nearly 1,000 miles of coast.

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- 5. An atomic ice-breaker, to be built by 1958, will be utilized in the Antarctic. Such a vessel may attempt to penetrate hitherto unapproachable coasts in order to claim additional discoveries in the Soviet political interest.
 - a. The entire coast of Marie Byrd Land where U.S. rights are strongest is one such major area where this may be attempted.
- F. According to remarks of the Director of the Chief Administration of the Northern Sea Route, the action body for the Soviet Antarctic program, the Soviets will remain on the Continent after the IGY.

V. Implications

- A. The intensive Soviet effort and future plans confirms Soviet statements that the greatest importance is attached to the Antarctic program. The comprehensiveness of studies and the large extent of their coverage indicates that more than scientific considerations motivate the Soviet plans and activities.
- B. Unlike the U.S. effort, the greater comprehensiveness of the Soviet program will yield additional data on the physical characteristics of the Continent. In addition to the selected IGY topics for the simultaneous study of world-wide phenomena, the heavy Soviet emphasis on geologic, geographic and mapping activities will yield materials essential to the delineation of the geography of the Continent. From this information the areas of value can be determined to form a knowledgeable basis for a Soviet claims position.
- C. The combination of geologic, hydrographic, and geographic activities with sea, land, and air experience will provide valuable information for determining the feasibility base establishment and year-round operations.

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- D. The comprehensiveness of Soviet activity coupled with the expansion of Soviet activities over a 35° sector from the coast to the Pole will represent a greater effort in the eastern Antarctic than that of any other nation, including the U.S. The resultant scientific studies and map coverage will significantly support either a Soviet voice in the sovereignty negotiations or a territorial claim, and diminish the weight of the sector claims of friendly powers based on coastal activities.
- E. The effective integration of logistical operations with scientific field studies represents a higher degree of efficiency reflected in the gain of an extra season of scientific observations. Further gain in scientific data was secured by the large proportion of scientific personnel -- 30 percent -- who wintered over. By the use of skillful Arctic-trained flier air operations were extended beyond the period of the longest winter night -- 28 June. This intensive activity was secured with an investment of 54,000,000 rubles, of which 34,000,000 is considered as an expendable cost. This will be increased by nearly 40 percent for the 1956-57 season.
- F. On the whole, Soviet scientific capabilities in the various fields are estimated to range from average to high, with most deficiencies attributable to inadequacies in certain type of instruments. Attempts are being made to correct some of these by the purchase of U.S. and other western instruments.

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VI. Possible courses of action

While the Soviets have not up to the present moment indicated the course of their political action, the past and future coincidence of political activities, scientific investigations and mapping appear to be pointed to the build-up of a flexible position that may take one of three courses of action:

- A. Staking out a claim to territory. Likely only if (a) the area of Soviet activity is found to be of value or (b) if a new wave of claims staking or negotiations are undertaken.
- B. If no great value is found in the Soviet sector, in contrast to the greater value of other sectors, internationalization may be proposed.
- C. The Soviets may remain at their permanent bases indefinitely and continue operations so long as it suits their purposes.